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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,076	08/25/2000	Siamack Nemazie	Nemazie-01US	5669
27728	7590	11/17/2005	EXAMINER	
LAW OFFICES OF IMAM 111 N. MARKET STREET, SUITE 1010 SAN JOSE, CA 95113			NGUYEN, STEVEN H D	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/648,076

**Applicant(s)**

NEMAZIE, SIAMACK

**Examiner**

Steven HD Nguyen

**Art Unit**

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☒ Claim(s) 2-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshifuji (USP 5631902).

Yoshifuji discloses a switching network (Fig 1) comprising  $m$  identical modules (Fig 1, Ref 220), said module further comprising an input stage (Fig 2, Ref 221-1 First stage,  $(n = n \times m = k)$  switch) comprising of a  $(n \times k)$  switch wherein  $n$  is an integer number representing the number of input lines and  $k$  is an integer number representing the number of output lines; a middle stage (Fig 2, Ref 222-1, second stage,  $(N = k' \times G = k')$  switch) switch comprising of a  $(k' \times k')$  switch,  $k'$  is an integer number representing the number of inputs and outputs; and an output stage comprising of a  $(k \times n)$  switch (Fig 2, Ref 223-1, third stage,  $(m = k \times n = g)$  switch,

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See col. 1, lines 43-59 wherein input or output ports of center stage is greater than output or input ports of input and output stage  $N'$  or  $G' > m$  to satisfy the function). Yoshifuji fails to disclose  $(m * Q(k'/m)) > k$ . However, it would have been obvious to one of ordinary skill in the art at the time of invention was made to apply a function to select  $k' = k$  in order to have  $k' > k$  stage into Yoshifuji's system because it has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954) and a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). The motivation would have been to branch the connections.

4. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henrion (USP 5237565).

Henrion discloses a switching network (Fig 11) comprising  $m$  identical modules (Fig 11, Ref PS1 to PS16), said module further comprising an input stage (Fig 11, Ref Psi1, ( $n = n = 16 \times m = k = 16$ ) switch) comprising of a ( $n \times k$ ) switch wherein  $n$  is an integer number representing the number of input lines and  $k$  is an integer number representing the number of output lines; a middle stage (Fig 11, Ref Psc1, ( $n = n = 32 \times m = k = 32$ ) switch) switch comprising of a ( $k' \times k'$ ) switch,  $k'$  is an integer number representing the number of inputs and outputs; and an output stage comprising of a ( $k \times n$ ) switch (Fig 11, Ref Pso1, ( $n = n = 16 \times m = k = 16$ ) switch, See col. 25, lines 43-62 wherein input or output ports of center stage is greater than output or input ports of input and output stage  $m = 16 * Q(k' = 32 / m = 16)) > k = 16$ ,  $32 = k' > 16 = k$ ). Henrion fails to disclose  $(m * Q(k'/m)) > k$ . However, it would have been obvious to one of ordinary skill in the art at the time of invention was made to apply a function to select  $k' = k$  in order to have  $k' > k$  stage into Henrion's system because it has been held that the provision of adjustability,

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where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954) and a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). The motivation would have been to branch the connections.

***Allowable Subject Matter***

5. Claim 1 allowed.

6. The following is a statement of reasons for the indication of allowable subject matter: As claim 1, the prior arts fail to disclose a switching network including rows and columns of switches comprising a first stage of switches defining a first column of said switching network having input lines and output lines and comprising  $m$  ( $n \times k$ ) input switches, wherein  $m$  is an integer number,  $n$  is an integer number representing the number of input lines and  $k$  is an integer number representing the number of output lines; a second stage of switches defining a second column of said switching network comprising of  $m$  ( $k' \times k'$ ) middle switches,  $k'$  is an integer number representing the number of inputs and outputs; and a third stage of switches defining a third column of said switching network comprising of  $m$  ( $k \times n$ ) switches, and a plurality of modules, each module defining a row of the switching network and including one input switch of the first stage of switches, one middle switch of the second stage of switches, one output switch of the third stage of switches, wherein the modules of the plurality of modules are identical and  $k'$  is selected such that  $m * Q(k'/m) > k$  (where  $Q(x/y)$  denotes the quotient of dividing  $x$  by  $y$ ) to allow using  $m$  switches in the second stage.

*Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

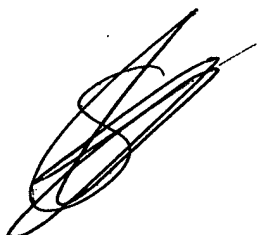
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Steven HD Nguyen', is written over a set of faint, overlapping horizontal lines.

Steven HD Nguyen  
Primary Examiner  
Art Unit 2665  
11/9/05